

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* MIYO MIYASHITA

---

Appeal No. 95-4545  
Application No. 08/094220<sup>1</sup>

---

ON BRIEF

---

Before THOMAS, SMITH, and CARMICHAEL, ***Administrative Patent Judges.***

CARMICHAEL, ***Administrative Patent Judge.***

***DECISION ON APPEAL***

This is an appeal from the final rejection of claims 1-4, which constitute all the claims remaining in the application.

Claim 1 reads as follow:

1. A level shift circuit which drops an output voltage of a prior stage circuit to an input voltage level required at a next stage circuit comprising:

---

<sup>1</sup> Application for patent filed July 21, 1993.

Appeal No. 95-4545  
Application No. 08/094220

a level shift diode having an anode and a cathode;

Appeal No. 95-4545  
Application No. 08/094220

a source follower enhancement-type field effect transistor having a gate connected as an input terminal of the circuit, a drain connected to a positive power supply, and a source connected to the anode of the level shift diode;

a constant current source having first and second terminals;

a current adjusting enhancement-type field effect transistor having a drain connected to the cathode of the level shift diode as an output terminal of the circuit and to the first terminal of the constant current source, a gate connected to the second terminal of the constant current source, and a source connected to a negative terminal of a power supply; and

a resistor connected between the source and the gate of the current adjusting enhancement-type field effect transistor whereby a gate-to-source voltage of the current adjusting enhancement-type field effect transistor is controlled by a current flowing through the resistor to enhancement-type field effect transistor.

The examiner's Answer cites the following prior art:

	Sharp	4,584,492	Apr. 22, 1986
	Shinohara et al. (Shinohara)	4,645,998	Feb. 24,
1987			
	MacMillan et al. (MacMillan)	4,926,071	May 15,
1990			
	Nagasawa	5,177,378	Jan. 5, 1993
	Seshita et al. (Seshita)	5,225,718	Jul. 6,
1993			

#### **OPINION**

Appeal No. 95-4545  
Application No. 08/094220

Claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nagasawa in view of Shinohara. Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Nagasawa in view of Shinohara and Seshita. Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Nagasawa in view of Sharp and McaMillian.

***Claim 1***

The examiner finds that Nagasawa discloses the claimed invention except that Nagasawa's pull down circuit 61 is different. The recited pull down circuit comprises a constant current source, a current adjusting enhancement-type field effect transistor, and a resistor connected in a certain way. The examiner finds that the recited pull down circuit is disclosed by Shinohara. Appellant does not take issue with those findings. In any event, we agree with those findings and adopt them as our own.

According to the examiner, Shinohara suggested replacing Nagasawa's pull down circuit 61 with Shinohara's pull down circuit so that Nagasawa would have a pull down circuit impervious to fluctuations in power supply. We agree with the

Appeal No. 95-4545  
Application No. 08/094220

examiner. Shinohara does indeed make such a suggestion to one of ordinary skill in the art. Column 3, lines 39-49.

Appellant argues that such a combination would not achieve his result, of providing a level shift that is immune to variations in the threshold values and/or gain coefficients in the FET's that comprises that circuit. However, such a result is

not recited. Claims undergoing examination are given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read into the claims. ***In re Etter***, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985) (in banc).

Appellant's argument is not commensurate in scope with his claims and is not persuasive.

Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. ***In re Beattie***, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir.

Appeal No. 95-4545  
Application No. 08/094220

1992); *In re Kronig*, 539 F.2d 1300, 1304, 190 USPQ 425 427-28  
(CCPA 1976);

*In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA  
1972). Therefore, the fact that the prior art suggested  
replacing Nagasawa's pull down circuit 61 with Shinohara's  
pull down circuit for a reason different than disclosed by  
appellant, does not change the fact that the prior art  
suggested a level shift circuit within the scope of Claim 1.

The rejection will be sustained.

### ***Claims 2 and 3***

Claims 2 and 3 stand or fall together with claim 1  
because appellants have presented no arguments for the  
separate patentability of Claim 1-3 under 37 CFR § 1.192.  
Because we sustain the rejection of Claim 1, we also sustain  
the rejections of claim 2 and 3.

### ***Claim 4***

Appeal No. 95-4545  
Application No. 08/094220

The examiner's rejection of Claim 4 proposes to replace Sharp's resistor 11 with an FET shown in MacMillan's Figure 14, and use the modified Sharp device as Nagasawa's bias voltage Vb. The examiner relies on "designs choice" for modifying Sharp. Examiner's Answer at 6.

Appellants argues:

"In making the rejection, the Examiner is essentially substituting the transistor of one reference for a resistor in another reference to build the present invention because the present invention utilizes a transistor in its constant current source and not a resistor. Impetus for this substitution is not provided by the references themselves nor by knowledge in the art. Thus, prima facie obviousness has not been established and, accordingly, the rejection of claim 4 is erroneous and should be reversed".

Appeal Brief at page 11, line 26, through page 12, line 8.

We agree with appellant. The mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992). In the present case, the examiner has identified no

Appeal No. 95-4545  
Application No. 08/094220

prior art suggestion that it would be desirable to modify  
Sharp as proposed in the rejection.

Because the examiner has not established a prima facie  
case of obviousness, we will not sustain the rejection of  
Claim 4.

#### ***CONCLUSION***

The rejections of Claim 1-3 are sustained. The rejection  
of claim 4 is not sustained.



Appeal No. 95-4545  
Application No. 08/094220

No period for taking any subsequent action in connection  
with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRED IN PART

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JERRY SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JAMES T. CARMIIHAEL	)	
Administrative Patent Judge	)	

Appeal No. 95-4545  
Application No. 08/094220

LEYDIG, VOIT & MAYER  
700 Thirteenth St., N.W.  
Suite 300  
Washington, D.C. 20005

